BRUHAT BANGALORE MAHANAGARA PALIKE

YELHANKA ZONE ELECTRICAL DIVISION

Name of Work :-Detailed Modefied Estimate for Providing Street Lights and Timers in Ward no 03.

Budget Head .....P-1771 Zone work - (POW) works.....

Division No..... Estimate No. 04/17-18.... For Rs. **2198432.21**

Sl.No.	SR Page & SL No	Description of Work	Qty.	Rate Rs.	Unit	Amount
1	33/5.2.1	Supply and erection of .....Mtr RCC Pole including earth work etc,. complete as per the standard technical specification of BESCOM 8Mtr 145Kg WL	15	6047.00	Nos	90705.00
2	108/17.12	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	53	893.00	Each	47329.00
3	12/2.12.1	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Aluminium** unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	300	7.50	Each	2250.00
4	56/7.6.4	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 2 X 25 + 1 X 25 SQ.MM	1925	143.00	Per Mtr	275275.00
5	Bes SR	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	1925	10.30	Per Mtr	19827.50
6	6.42.2	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300mmx450mmx214mm	10	5826.00	Nos	58260.00
7	47/6.16.6	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.f)40-63 Amps SP, Group A	10	677.00	Each	6770.00

8	46/6.12 .4	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	10	9915.00	Each	99150.00
9	6/2.6.7	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	10	132.00	Per Mtr	1320.00
10	17/3.10	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	20000	0.22	Sqcm	4400.00
11	6 2/1.1.2	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plug incase of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. c)25mm dia 2mm thick	60	70.00	Mtrs	4200.00
12	7 56 /6.40.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat… with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. A)40x40x6mm.	10	263.00	Mtrs	2630.00
13	10 AR	Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	10	7214.00	Nos	72140.00
14	34/5.11	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	1500	30.00	Mtrs	45000.00
15	34/5.9. 1	Supplying and Fixing …..including all Hardware's etc. complete as per the standard technical specification of BESCOM 1.1 KV Pin Insulator	29	44.00	Nos	1276.00
16	34/5.9.	No. 8 Strain Insulator	15	14.00	Nos	210.00
17	5.4.2	Supply and fixing of …….cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm - 510mm	30	306.00	Nos	9180.00
18	108/17. 5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	20	176.00	Nos	3520.00

	27/4.36.2	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II.110 Watts	54	25621.79	Nos	1383576.66
20	50/6.41.1	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	15	1629.79	Nos	24446.85
21	49/6.39.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	8	196.80	Mtrs	1574.40
22	46/6.13.A.1	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps25kA.	15	3026.12	Nos	45391.80
23		Mislenious				
		Total				**2198432.21**

TECHNICALLY SANCTIONED FOR Rs. 22 reduced
Rupees Twenty Two Lakhs
Under P1771 - Zone Works
Dev. Works
Registered as EE ( ) No. 9 9
Subject to conditions contained in
enclosed memo EE ( ) No. 0.00 reduced 22/2
Dt. 27-06-2017 Estimate A/ Sanctioned
Dated 16-02-2017 No.
CE(Elec)/YZ/AS/190/17-18 Rs. 22 reducing
Executive Engineer

CERTIFICATE

1. The Place was inspected and work is essential
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 .

Jr/Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
yelhanka zone
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELHANKA ZONE
BRUHAT BANGALORE MAHANAGARA PALIKE

"Modified Estimate Sanctioned"

Chief Engineer
Yelhanka Zone
Bruhat Bangalore Mahanagara
Palike Bangalore 99
27/06/17